

## **DOD DIAL CIRCUIT RELOCATION ON THE RADAR PRODUCT GENERATOR**

### **DOPPLER METEOROLOGICAL RADAR WSR-88D**



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**NWS: EHB-6, Modification Note 71**  
**DoD: TO 31P1-4-108-610**  
**FAA: EEM Modification Handbook 6345.1 CHG 40, Chap 37**



**FAA APPROVAL**

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**NWS: EHB-6, Modification Note 71**  
**DoD: TO 31P1-4-108-610**  
**FAA: EEM Modification Handbook 6345.1 CHG 40, Chap 37**

**1. SUBJECT**

DoD Dial Circuit Relocation on the Radar Product Generator (RPG).

**2. PURPOSE**

This document provides instructions for relocating specific dial DoD telecommunications circuits on the NEXRAD RPG dial demarc block. These relocations will reallocate X.25 serial ports as Point-to-Point Protocol (PPP) serial ports. This change is required to support conversion of the DoD radar display system called the Open Principal User Processor (OPUP) system from X.25 to PPP.

Most RPGs will have one DoD dial circuit relocated and converted from X.25 to PPP. The overseas DoD RPGs in Korea/Japan will have three dial circuits relocated and converted to PPP. Andersen AFB will have three dial circuits relocated, but only one will be converted to PPP. Andersen AFB will also install and set up two dual dial modem cards.

This modification for dial circuit moves will be deployed for all RPGs at the beginning of the OPUP deployment schedule. Modification Note 72 will be issued separately to address the dedicated circuit moves required to support OPUP. It will be deployed for individual RPGs corresponding to the OPUP schedule.

After the OPUP Spiral III deployment is complete, Modification Note 73 will be issued to complete the RPG upgrade. Modification Note 73 will provide cables that convert the remaining two DoD dial ports from X.25 to PPP. For the majority of RPGs, these two ports must remain X.25 for inter-operability with legacy DoD PUPs until after OPUP deployment. However, Lajes AB will actually receive Modification Note 73 as soon as the Lajes AB OPUP is installed. Camp Humphreys, Kadena AB, and Kunsan AB will be instructed to complete Modification Note 73 ahead of Modification Note 71 (out of sequence).

NWS EHB 6-525, Revision 1, dated 30 April 2003 provides the documentation change for all four OPUP driven modifications ([Modification Notes 65](#), 71, 72, and 73). The authority for these modifications is ECP 0158R2, ORPG PPP SERIAL HW FOR DoD.

For additional information concerning this document, contact the Radar Operations Center (ROC) Hotline, Norman, OK; phone number: (800) 643-3363 or (405) 366-2980 or by e-mail at [NEXRAD.Hotline@noaa.gov](mailto:NEXRAD.Hotline@noaa.gov). An electronic copy of this document can be found at the following Internet address:  
[www.roc.noaa.gov/ssb/sysdoc/techman/tmlinks.asp](http://www.roc.noaa.gov/ssb/sysdoc/techman/tmlinks.asp)

**3. SITES AFFECTED**

See [ATTACHMENT 4](#).

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**4. ESTIMATED COMPLETION DATE**

This modification must be reported completed no later than 60 days after receipt of this document and the date the kit was shipped from the National Logistics Support Center (NLSC).

**5. EQUIPMENT AFFECTED**

Radar Product Generator Group.

**6. SPARES AFFECTED**

Not applicable.

**7. MODIFICATION ACCOMPLISHED BY**

Site electronics technicians will perform this modification. Two technicians are required to perform this action.

**8. MATERIAL REQUIRED**

Kit F. (Andersen AFB only)

<b>Nomenclature</b>	<b>Part Number</b>	<b>NSN</b>	<b>Qty</b>
Modem Card, Dual Dial Data	1219739-203 (or -209)	5895-01-377-7114	2

The following common tools/supplies are required to complete the modification:

- Pliers, Miniature Cutters
- ESD Wrist Strap
- Current Communications Documentation Notebook
- Telephone Butt Set, Harris TS22 or equivalent
- Six Wire Modular Adapter, Harris 10220-100 or equivalent
- Impact Punch Tool, Jensen 23-814 or equivalent
- Impact Punch Tool 66 Blade, Jensen 23-066 or equivalent

**9. SOURCE OF MATERIALS**

Kits are requisitioned by the ROC Retrofit Management Team and shipped at no cost to the site.

**10. SPECIAL TOOLS AND TEST EQUIPMENT REQUIRED**

Not applicable.

**11. TIME AND PERSONNEL REQUIRED**

Work Phases	Work-hours
Unpacking	.25
Disassembly	1.0
Installation	1.0
Assembly	0.0
Operational Check	1.0
Total Work-hours	3.25

**12. DOCUMENTS AFFECTED**

Not applicable.

**13. VERIFICATION STATEMENT**

This modification was successfully installed at the Radar Operations Center, OK.

**14. DISPOSITION OF REMOVED AND REPLACED PARTS/MATERIALS**

Not applicable.

**15. PROCEDURES**

- All Sites:
  - Complete [ATTACHMENT 1](#).
  - (except Andersen AFB): Complete [ATTACHMENT 2](#).
- Andersen AFB: Complete [ATTACHMENT 3](#).
  - [ATTACHMENT 1](#) - DOWNLOAD NEXRAD TELECOMMUNICATIONS CIRCUIT REPORTS.
  - [ATTACHMENT 2](#) - REWIRE RPG DIAL BLOCK (ALL SITES, EXCEPT ANDERSEN AFB).
  - [ATTACHMENT 3](#) - ANDERSEN AFB - INSTALL TWO DIAL MODEMS AND REWIRE RPG DIAL BLOCK.

**16. FAA DISTRIBUTION**

This directive is distributed to selected offices and services within Washington headquarters, the William J. Hughes Technical Center, the Mike Monroney Aeronautical Center, regional Airway Facilities divisions, and Airway Facilities field offices having the following facilities/equipment: NXRAD.

**17. CHANGES TO TABLE OF CONTENTS (FAA)**

This chapter will be included in the next revision to the table of contents for FAA Order 6345.1, Electronic Equipment Modification Handbook - Next Generation Weather Radar (NEXRAD).

**18. RECOMMENDATIONS FOR CHANGES (FAA)**

Forward any recommendations for changes to this directive through normal channels to the National Airway Systems Engineering Division, AOS-200, Operational Support.

**19. REPORTING INSTRUCTIONS**

**a. NWS**

Report the completed modification using the Engineering Management Reporting System (EMRS) according to the instructions in NWS Instruction 30-2104, Maintenance Documentation, Part 4 and Appendix E. Include the following information on the EMRS report:

- (1) An Equipment Code of RPG in Block 7.
- (2) The appropriate serial number in Block 8.
- (3) A Mod No. of 71 in Block 17a.

A sample EMRS report is provided as ATTACHMENT 6.

**b. DoD**

Update the AFTO Form 95 to show TCTO compliance. Report TCTO compliance in accordance with TO 00-20-2, Table 3-10, Rule 9.

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**c. FAA**

Enter this directive number, date, and chapter number on the appropriate FAA Form 6032-1, Airway Facilities Modification Record.

Use the Maintenance Management System (MMS) application Log Equipment Modification (LEM) function to report the completion of this modification. Verify N is in the REP COD field to ensure the log entry will be upward reportable to the national data base for access by AOS. This directive should be entered into the LEM fields as follows:

(1) Order No.: 6345.1

(2) Chapter: 37

(3) Change: 40

**d. DoD and FAA**

Complete [ATTACHMENT 5](#), and return the information to the ROC by one of the four methods below:

- |                     |   |
|---------------------|---|
| (1) Mail Address:   | Program Branch, Retrofit Management Team<br>WSR-88D Radar Operations Center<br>3200 Marshall Ave., Suite 101<br>Norman, Oklahoma 73072-8028 |
| (2) Fax Number:     | (405) 366-6553<br>ATTN: Retrofit Management Team  |
| (3) E-mail Address: | <a href="mailto:NEXRAD.Logistics@noaa.gov">NEXRAD.Logistics@noaa.gov</a>  |
| (4) Web Version:    | <a href="http://www.roc.noaa.gov/ssb/logistics/completion.asp">http://www.roc.noaa.gov/ssb/logistics/completion.asp</a>                     |

## ATTACHMENT 1

### DOWNLOAD NEXRAD TELECOMMUNICATIONS CIRCUIT REPORTS

#### Tools/Materials Required:

- Networked PC/Workstation with:
  - Internet connection
  - Printer connection
  - One of the following web browsers loaded on the PC/Workstation:
    - Microsoft Internet Explorer Version 6.0 or later
    - Netscape 4.79 or later

#### Initial Conditions:

Completed [Modification Note 65](#)

#### Purpose:

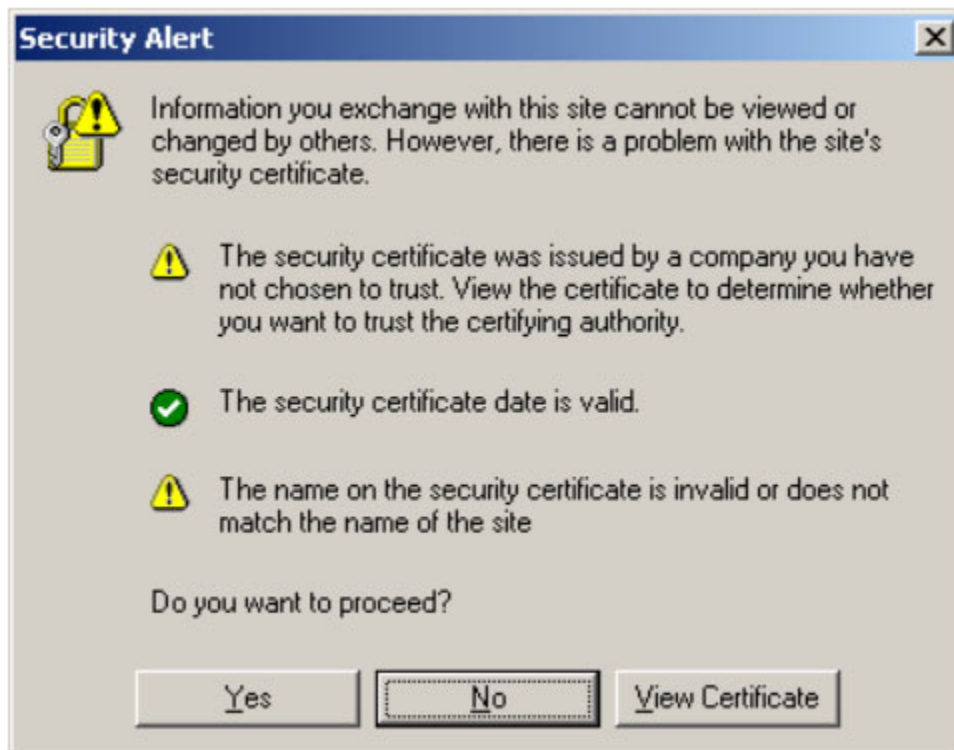
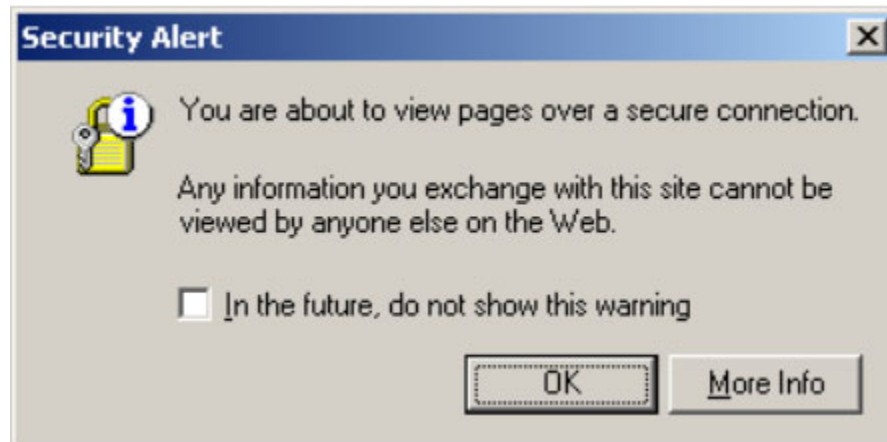
The purpose of this procedure is to remotely access the current NEXRAD RPG Telecommunications Circuit Reports (TCRs) from the ROC web server via the Internet. The TCRs are needed to complete the dial demarc panel rewiring procedures in [ATTACHMENT 2](#). The reports are maintained on a secure web server at the NWS ROC and generated from the ROC's NEXRAD circuit database.

If you do not have an account, contact the WSR-88D Hotline at 1-800-643-3363 for your "Logon Name" and "Password" to access the secure ROC web site that hosts NEXRAD telecommunications data. The Hotline Specialists will have an updated list of all personnel authorized to access the secure web page. Simply identify your name and organization to the hotline specialist and request your logon name and password for access to the secure web page.

1. Use a PC or laptop with access to the Internet either by the program Netscape or Internet Explorer (preferred browser for this procedure) to enter into the ROC web server. Go to the following web page location: <https://www.roc.noaa.gov/comms/>. Do not obtain the TCRs more than a couple of days in advance of completing this modification for a given RPG site, because ROC may have incorporated updates that you would miss.
2. If this is the first time to access this web site, then a New Site Certificate window will appear. Click the **Next** button in each subsequent certificate window. In the last certificate window, click on the **Finish** button. A new window will appear titled Certificate Name Check. Click on the continue button in this and the subsequent Security Information window until the WSR-88D Comms Notebook Secure Login window appears. If this certificate is not expired, then the following dialog boxes appear. Click **OK** or **Yes** as appropriate until the WSR-88D Comms Notebook Secure Login window appears.

ATTACHMENT 1 (Continued)

DOWNLOAD NEXRAD TELECOMMUNICATIONS CIRCUIT REPORTS

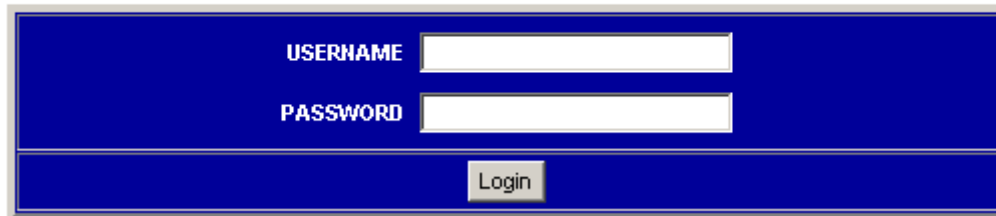


ATTACHMENT 1 (Continued)

DOWNLOAD NEXRAD TELECOMMUNICATIONS CIRCUIT REPORTS

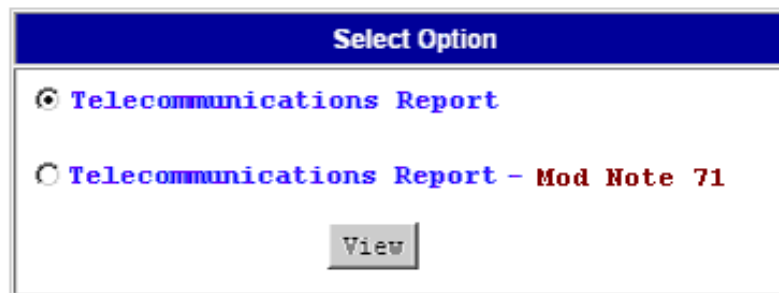
3. Enter the *site login name* and *password* and then click on the **Login** button.

WSR-88D Comms Notebook Secure Login

A screenshot of a web login form with a blue background. It contains two white input fields labeled 'USERNAME' and 'PASSWORD'. Below the fields is a 'Login' button.

4. Upon login, the selection options should appear as shown below (where SITENAME is the name of your WSR-88D, e.g., VANCE AFB (AFWA), SAN JUAN (FAA), or LITTLE ROCK (NWS). If so, proceed to step 5. Do not proceed if the option for [Modification Note 65](#) instead of Modification Note 72 appears. This means the comms database interface to the web page does not reflect your site's completion of Modification Note 65. Notify the Hotline that Modification Note 65 is complete and the web site will be updated accordingly. Repeat this attachment from step 1 after the web site has been updated.

WSR-88D Communication Documentation Notebook for SITENAME

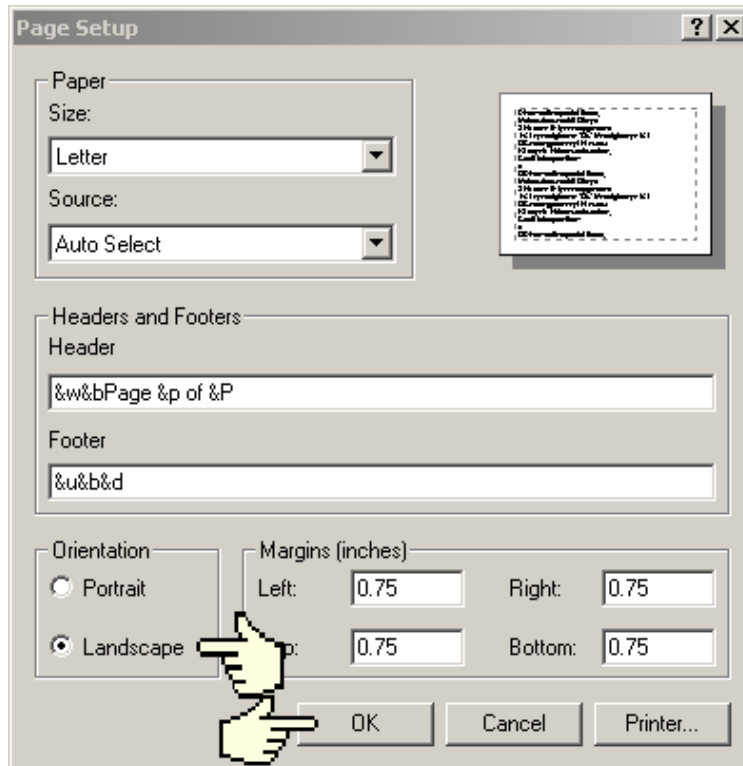
A screenshot of a web form titled 'Select Option'. It has a blue header bar. Below the header, there are two radio button options: 'Telecommunications Report' (selected) and 'Telecommunications Report - Mod Note 71'. At the bottom is a 'View' button.

5. In the *Select Options* area of this window, click on the **Telecommunications Report** button to select the current Telecommunications Report. Then click on the **View** button, and the web browser will advance to the Communications Notebook/Telecommunications Circuit Report (TCR) for the site. To print the TCR, first setup for Landscape print format:

ATTACHMENT 1 (Continued)

DOWNLOAD NEXRAD TELECOMMUNICATIONS CIRCUIT REPORTS

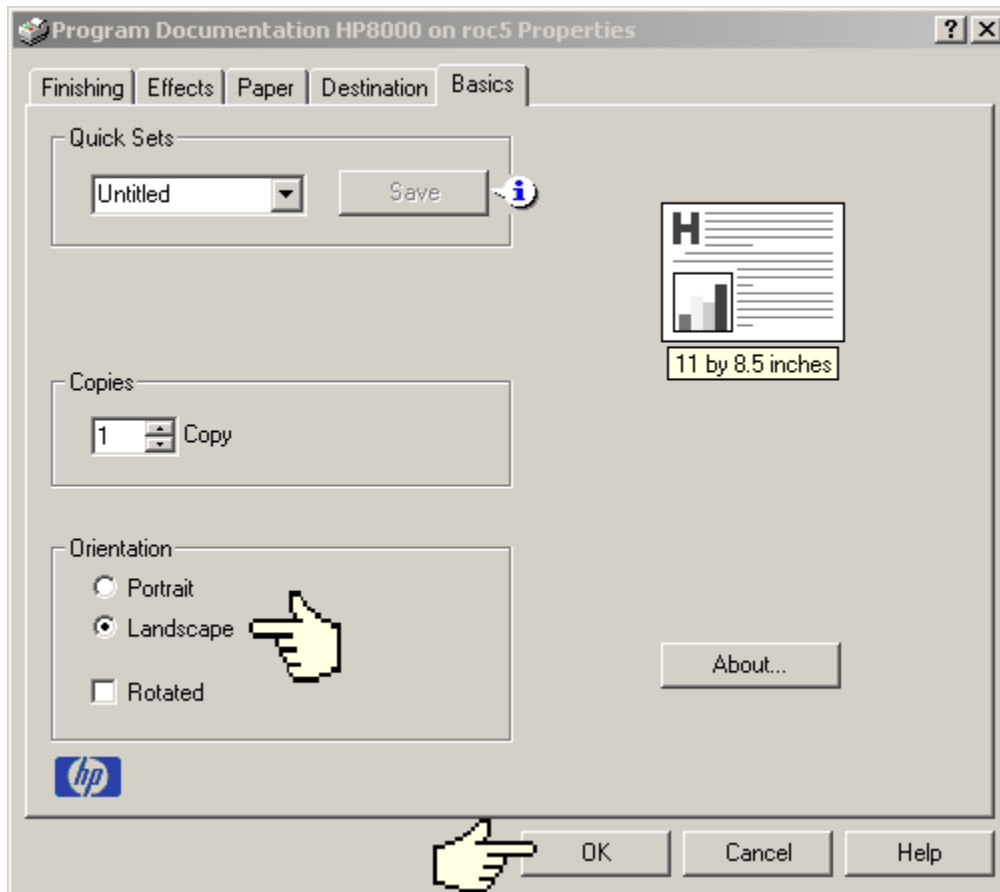
- a. Internet Explorer: Select **File**, then select the **Page Setup** item from the main menu drop down list. The *Page Setup* dialog box will appear on the screen. In the dialog box, select the **Landscape** button under the dialog box area titled *Orientation*. Select the **OK** button to close the dialog box and save the orientation setting. Then, Print from the File menu.



ATTACHMENT 1 (Continued)

DOWNLOAD NEXRAD TELECOMMUNICATIONS CIRCUIT REPORTS

- b. Netscape: Select **File** and then select **Print** from the File menu. Click on the **Properties** dialog box, find the page **Orientation** section and select **Landscape**. Click **OK** to save the change and then click **OK** in the Print dialog box



6. Repeat step 5, except click on the **Telecommunications Report - Mod Note 71** in the Select Options area of this window.

## ATTACHMENT 2

### REWIRE RPG DIAL BLOCK (ALL SITES, EXCEPT ANDERSEN AFB)

#### Tools/Materials Required:

- Telephone Butt Set, Harris TS22 or equivalent
- Six Wire Modular Adapter, Harris 10220-100 or equivalent
- Impact Punch Tool, Jensen 23-814 or equivalent
- Impact Punch Tool 66 Blade, Jensen 23-066 or equivalent
- TCRs obtained per [ATTACHMENT 1](#)

#### Initial Conditions:

All RPGPCA components installed

RPG Software Build 3.0 or later is installed

Equipment powered on and RPG software operational

Technician is logged into the RPG workstation as a user

RPG HCI is running

RPG is clear of RPG alarms

All Sites: Completed [Modification Note 65](#)

Only Camp Humphreys, Kunsan, Kadena, and Lajes: Also completed Modification Note 73

#### Purpose:

The purpose of this procedure is to relocate one or more dial lines on the TB1 (1-RJ21X) dial-up RPG punch block. The dial circuits will be verified as working before and after relocation.

1. Refer to the appropriate reference figure located at the end of this procedure. The figure will be used to determine which circuit(s) will be relocated at this RPG:

[Figure 2-2](#) Dial Circuit Move for all CONUS RPGs plus Bethel, AK; King Salmon, AK; Molokai, HI; and South Shore, HI

[Figure 2-3](#) Dial Circuit Move for Anchorage, AK; Fairbanks, AK; Kamuela/Kahala, HI; Nome, AK; San Juan, PR; and South Kauai, HI

[Figure 2-4](#) Dial Circuit Moves from Camp Humphreys

[Figure 2-5](#) Dial Circuit Move for Lajes AB

[Figure 2-6](#) Dial Circuit Moves for Kadena AB

[Figure 2-7](#) Dial Circuit Moves for Kunsan AB

[Figure 2-8](#) Dial Circuit Move for Sitka

**ATTACHMENT 2 (Continued)**

**REWIRE RPG DIAL BLOCK (ALL SITES, EXCEPT ANDERSEN AFB)**

**NOTE**

Dial port password changes are not required, as these changes are incorporated into RPG Software Build 3.0.

2. Reference the current TCR obtained per [ATTACHMENT 1](#) to identify the corresponding phone number(s) of the 2-wire dial circuit(s) that will be relocated per the reference figure applicable to your system.

**NOTE**

CONUS RPGs and San Juan will need to use Sprint FTS 2001 Virtual Private Network (VPN) dial lines for the verification in step [3](#). The Air Force dial lines being verified are on a secure VPN and they are inaccessible when dialing from a commercial Plain Old Telephone Service (POTS) number.

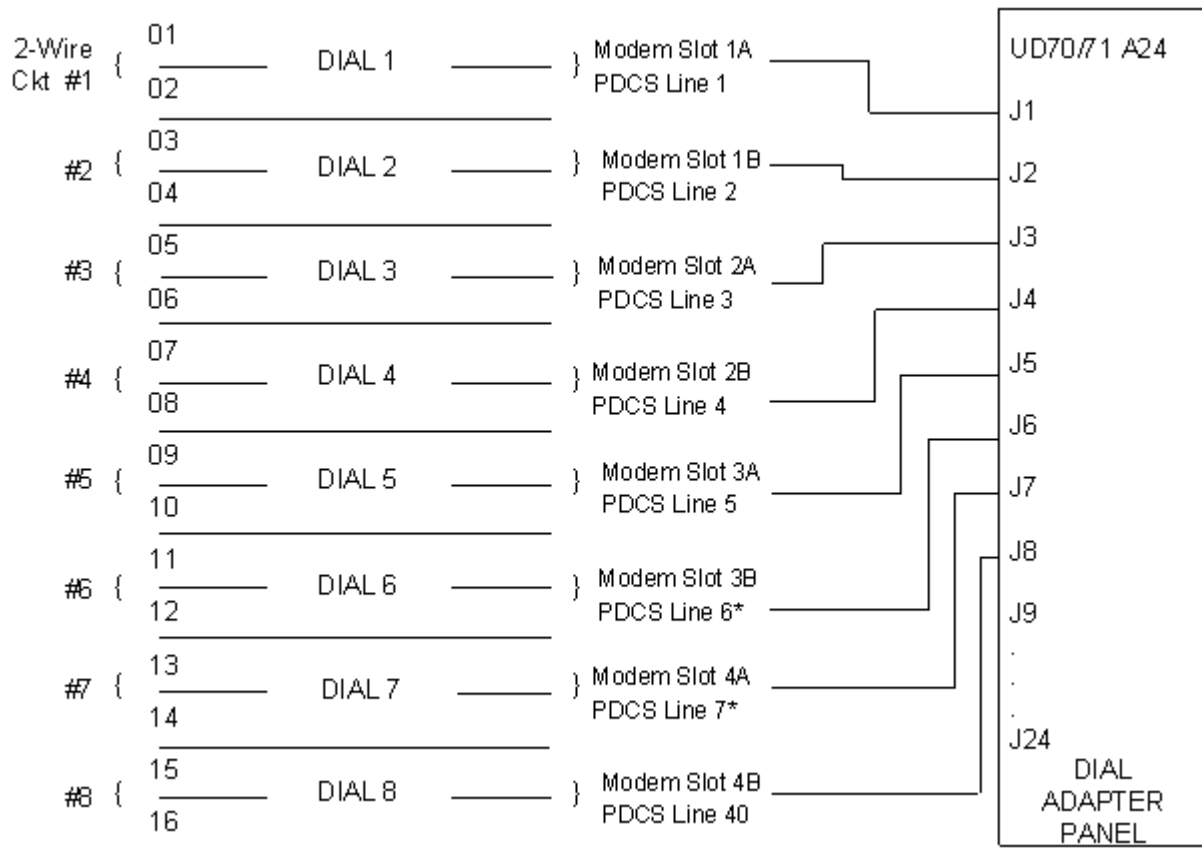
3. Verify each dial port is working correctly before relocation of the circuit. For FAA Redundant, verify the dial port is working correctly on both RPG channels. Contact the WSR-88D Hotline at 1-800-643-3363 and request a Hotline Specialist dial and receive a product from these port(s) using their X.25 PUP. This check verifies the port(s) are working before the numbers are relocated. For an additional pre-check, use the Telephone Butt Set (Harris TS22 or equivalent) to dial from one RPG number to another. Plug the Butt set into one of the jacks (J1 through J8) on the RPG dial adapter panel. The jacks correspond one for one to the dial block circuit numbers and the Product Distribution Communications Status (PDCS) window of the RPG software as indicated in [Figure 2-1](#) below. Ensure the jack selected has a working dial number as indicated on the TCR. Using the Butt set, dial the RPG phone number(s) of

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**ATTACHMENT 2 (Continued)**

**REWIRE RPG DIAL BLOCK (ALL SITES, EXCEPT ANDERSEN AFB)**

the circuit(s) to be relocated and ensure the correct modem answers. Do not proceed until the dial circuits to be relocated are in working order (on both channels for FAA redundant).



\* For Camp Humphreys, Kadena AB, Kunsan AB, and Lajes AB, modem 3B now corresponds to PDCS Line 38 and Modem 4A to Line 39.

Figure 2-1. Map from Dial Adapter Panel to RPG 1-RJ21X (TB1) Block

**ATTACHMENT 2 (Continued)**

**REWIRE RPG DIAL BLOCK (ALL SITES, EXCEPT ANDERSEN AFB)**

4. Refer to the appropriate reference figure given in step 1. Remove the 2-wire dial circuit from the telco side of the NEXRAD RPG dial block (1-RJ21X or TB1). If this is a NWS RPG, which has an extended RPG demarc, then remove the circuit from the corresponding extended dial block instead of the NEXRAD block. Punch the circuit at its new location using an impact punch tool (Jensen 23-814 or equivalent).
5. Repeat step 4 for each circuit to be relocated.
6. Using the Butt set, dial the RPG phone number(s) of the circuit(s), which were relocated. Ensure the correct modem answers. All sites should verify the new PPP dial port on circuit 8 (PDCS line 40) is also operational. For FAA redundant, verify on both channels. Call the WSR-88D Hotline at 1-800-643-3363 and have a Hotline Specialist dial and receive a product from line 40 using their DoD Spiral II OPUP. In addition, Camp Humphreys, Kunsan AB, and Kadena AB should also request the WSR-88D Hotline verify the PPP dial ports on circuits 6 and 7 (PDCS lines 38 and 39) are working correctly.
7. All sites, except Camp Humphreys, Kunsan AB, and Kadena AB will replace their current TCR with the version titled Telecommunications Circuit Report - Modification Note 71 obtained per [ATTACHMENT 1](#). For Camp Humphreys, Kunsan AB, and Kadena AB, there will be only one final version of the TCR that correctly reflects all changes incorporated for Modification Notes 71, 72 and 73, since these modifications are being performed together.

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**ATTACHMENT 2 (Continued)**

**REWIRE RPG DIAL BLOCK (ALL SITES, EXCEPT ANDERSEN AFB)**

<b><u>BEFORE CIRCUIT MOVE</u></b>			<b><u>AFTER CIRCUIT MOVE</u></b>		
<b>RPG DIAL BLOCK</b>			<b>RPG DIAL BLOCK</b>		
<b>1-RJ21X or TB1</b>			<b>1-RJ21X or TB1</b>		
2-Wire Ckt #1	{ 01 02	NWS DIAL 1 ——— } Modern Slot 1A PDCS Line 1	2-Wire Ckt #1	{ 01 02	NWS DIAL 1 ——— } Modern Slot 1A PDCS Line 1
#2	{ 03 04	NWS DIAL 2 ——— } Modern Slot 1B PDCS Line 2	#2	{ 03 04	NWS DIAL 2 ——— } Modern Slot 1B PDCS Line 2
#3	{ 05 06	NWS DIAL 3 ——— } Modern Slot 2A PDCS Line 3	#3	{ 05 06	NWS DIAL 3 ——— } Modern Slot 2A PDCS Line 3
#4	{ 07 08	NWS DIAL 4 ——— } Modern Slot 2B PDCS Line 4	#4	{ 07 08	NWS DIAL 4 ——— } Modern Slot 2B PDCS Line 4
#5	{ 09 10	AIR FORCE DIAL 1 — } Modern Slot 3A PDCS Line 5	#5	{ 09 10	FAA DIAL ——— } Modern Slot 3A PDCS Line 5
#6	{ 11 12	AIR FORCE DIAL 2 . } Modern Slot 3B PDCS Line 6	#6	{ 11 12	AIR FORCE DIAL 2 . } Modern Slot 3B PDCS Line 6
#7	{ 13 14	US NAVY DIAL — } Modern Slot 4A PDCS Line 7	#7	{ 13 14	US NAVY DIAL — } Modern Slot 4A PDCS Line 7
#8	{ 15 16	FAA DIAL ——— } Modern Slot 4B PDCS Line 40	#8	{ 15 16	AIR FORCE DIAL 1 . } Modern Slot 4B PDCS Line 40

Figure 2-2. Dial Circuit Move for all CONUS RPGs plus Bethel, AK; King Salmon, AK; Molokai, HI; and South Shore, HI

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**ATTACHMENT 2 (Continued)**

**REWIRE RPG DIAL BLOCK (ALL SITES, EXCEPT ANDERSEN AFB)**

<u>BEFORE CIRCUIT MOVE</u>				<u>AFTER CIRCUIT MOVE</u>					
RPG DIAL BLOCK				RPG DIAL BLOCK					
1-RJ21X or TB1				1-RJ21X or TB1					
2-Wire Ckt #1	{ 01 02	NWS DIAL 1	—— }	Modem Slot 1A PDCS Line 1	2-Wire Ckt #1	{ 01 02	NWS DIAL 1	—— }	Modem Slot 1A PDCS Line 1
#2	{ 03 04	NWS DIAL 2	—— }	Modem Slot 1B PDCS Line 2	#2	{ 03 04	NWS DIAL 2	—— }	Modem Slot 1B PDCS Line 2
#3	{ 05 06	NWS DIAL 3	—— }	Modem Slot 2A PDCS Line 3	#3	{ 05 06	NWS DIAL 3	—— }	Modem Slot 2A PDCS Line 3
#4	{ 07 08	NWS DIAL 4	—— }	Modem Slot 2B PDCS Line 4	#4	{ 07 08	NWS DIAL 4	—— }	Modem Slot 2B PDCS Line 4
#5	{ 09 10	AIR FORCE DIAL 1	- }	Modem Slot 3A PDCS Line 5	#5	{ 09 10	FAA DIAL	- }	Modem Slot 3A PDCS Line 5
#6	{ 11 12	AIR FORCE DIAL 2*	· }	Modem Slot 3B PDCS Line 6	#6	{ 11 12	AIR FORCE DIAL 2	· }	Modem Slot 3B PDCS Line 6
#7	{ 13 14	US NAVY DIAL	- }	Modem Slot 4A PDCS Line 7	#7	{ 13 14	US NAVY DIAL	- }	Modem Slot 4A PDCS Line 7
#8	{ 15 16	FAA DIAL	—— }	Modem Slot 4B PDCS Line 40	#8	{ 15 16	AIR FORCE DIAL 1	- }	Modem Slot 4B PDCS Line 40

\*NOTE: AIR FORCE DIAL 2 will become AIR FORCE DIAL 1 when it moves to its new location at circuit # 8.

Figure 2-3. Dial Circuit Move for Anchorage, AK; Fairbanks, AK; Kamuela/Kahala, HI; Nome, AK; San Juan, PR; and South Kauai, HI

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ATTACHMENT 2 (Continued)

REWIRE RPG DIAL BLOCK (ALL SITES, EXCEPT ANDERSEN AFB)

<u>BEFORE CIRCUIT MOVE</u>				<u>AFTER CIRCUIT MOVE</u>			
RPG DIAL BLOCK				RPG DIAL BLOCK			
1-RJ21X or TB1				1-RJ21X or TB1			
2-Wire Ckt #1	{ 01 02	AIR FORCE DIAL 1 -	} Modem Slot 1A PDCS Line 1	2-Wire Ckt #1	{ 01 02	TBD -	} Modem Slot 1A PDCS Line 1
#2	{ 03 04	AIR FORCE DIAL 2 -	} Modem Slot 1B PDCS Line 2	#2	{ 03 04	TBD -	} Modem Slot 1B PDCS Line 2
#3	{ 05 06	AIR FORCE DIAL 3 -	} Modem Slot 2A PDCS Line 3	#3	{ 05 06	TBD -	} Modem Slot 2A PDCS Line 3
#4	{ 07 08	AIR FORCE DIAL 4 -	} Modem Slot 2B PDCS Line 4	#4	{ 07 08	AIR FORCE DIAL 4 -	} Modem Slot 2B PDCS Line 4
#5	{ 09 10	US NAVY DIAL -	} Modem Slot 3A PDCS Line 5	#5	{ 09 10	US NAVY DIAL -	} Modem Slot 3A PDCS Line 5
#6	{ 11 12	TBD -	} Modem Slot 3B PDCS Line 38	#6	{ 11 12	AIR FORCE DIAL 1 -	} Modem Slot 3B PDCS Line 38
#7	{ 13 14	TBD -	} Modem Slot 4A PDCS Line 39	#7	{ 13 14	AIR FORCE DIAL 2 -	} Modem Slot 4A PDCS Line 39
#8	{ 15 16	TBD -	} Modem Slot 4B PDCS Line 40	#8	{ 15 16	AIR FORCE DIAL 3 -	} Modem Slot 4B PDCS Line 40

Figure 2-4. Dial Circuit Moves from Camp Humphreys

NWS: EHB-6, Modification Note 71  
DoD: TO 31P1-4-108-610  
FAA: EEM Modification Handbook 6345.1 CHG 40, Chap 37

ATTACHMENT 2 (Continued)

REWIRE RPG DIAL BLOCK (ALL SITES, EXCEPT ANDERSEN AFB)

<u>BEFORE CIRCUIT MOVE</u>				<u>AFTER CIRCUIT MOVE</u>			
RPG DIAL BLOCK				RPG DIAL BLOCK			
1-RJ21X or TB1				1-RJ21X or TB1			
2-Wire	01	AIR FORCE DIAL 1	}	2-Wire	01	TBD	}
Ckt #1	02			Ckt #1	02		
#2	03	TBD	}	#2	03	TBD	}
	04				04		
#3	05	TBD	}	#3	05	TBD	}
	06				06		
#4	07	TBD	}	#4	07	TBD	}
	08				08		
#5	09	TBD	}	#5	09	TBD	}
	10				10		
#6	11	TBD	}	#6	11	TBD	}
	12				12		
#7	13	TBD	}	#7	13	TBD	}
	14				14		
#8	15	TBD	}	#8	15	AIR FORCE DIAL 1	}
	16				16		

Figure 2-5. Dial Circuit Move for Lajes AB

NWS: EHB-6, Modification Note 71  
DoD: TO 31P1-4-108-610  
FAA: EEM Modification Handbook 6345.1 CHG 40, Chap 37

ATTACHMENT 2 (Continued)

REWIRE RPG DIAL BLOCK (ALL SITES, EXCEPT ANDERSEN AFB)

<u>BEFORE CIRCUIT MOVE</u>				<u>AFTER CIRCUIT MOVE</u>			
RPG DIAL BLOCK				RPG DIAL BLOCK			
1-RJ21X or TB1				1-RJ21X or TB1			
2-Wire	01			2-Wire	01		
Ckt #1	02	AIR FORCE DIAL 1	Modem Slot 1A PDCS Line 1	Ckt #1	02	TBD	Modem Slot 1A PDCS Line 1
#2	03	AIR FORCE DIAL 2	Modem Slot 1B PDCS Line 2	#2	03	TBD	Modem Slot 1B PDCS Line 2
	04				04		
#3	05	AIR FORCE DIAL 3	Modem Slot 2A PDCS Line 3	#3	05	TBD	Modem Slot 2A PDCS Line 3
	06				06		
#4	07	AIR FORCE DIAL 4	Modem Slot 2B PDCS Line 4	#4	07	AIR FORCE DIAL 4	Modem Slot 2B PDCS Line 4
	08				08		
#5	09	AIR FORCE DIAL 5	Modem Slot 3A PDCS Line 5	#5	09	AIR FORCE DIAL 5	Modem Slot 3A PDCS Line 5
	10				10		
#6	11	TBD	Modem Slot 3B PDCS Line 38	#6	11	AIR FORCE DIAL 1	Modem Slot 3B PDCS Line 38
	12				12		
#7	13	TBD	Modem Slot 4A PDCS Line 39	#7	13	AIR FORCE DIAL 2	Modem Slot 4A PDCS Line 39
	14				14		
#8	15	TBD	Modem Slot 4B PDCS Line 40	#8	15	AIR FORCE DIAL 3	Modem Slot 4B PDCS Line 40
	16				16		

Figure 2-6. Dial Circuit Moves for Kadena AB

**NWS: EHB-6, Modification Note 71**  
**DoD: TO 31P1-4-108-610**  
**FAA: EEM Modification Handbook 6345.1 CHG 40, Chap 37**

**ATTACHMENT 2 (Continued)**

**REWIRE RPG DIAL BLOCK (ALL SITES, EXCEPT ANDERSEN AFB)**

<u>BEFORE CIRCUIT MOVE</u>				<u>AFTER CIRCUIT MOVE</u>					
RPG DIAL BLOCK				RPG DIAL BLOCK					
1-RJ21X or TB1				1-RJ21X or TB1					
2-Wire Ckt #1	{	$\frac{01}{02}$ AIR FORCE DIAL 1	- }	Modem Slot 1A PDCS Line 1	2-Wire Ckt #1	{	$\frac{01}{02}$ AIR FORCE DIAL 1	- }	Modem Slot 1A PDCS Line 1
#2	{	$\frac{03}{04}$ AIR FORCE DIAL 2	- }	Modem Slot 1B PDCS Line 2	#2	{	$\frac{03}{04}$ TBD	- }	Modem Slot 1B PDCS Line 2
#3	{	$\frac{05}{06}$ AIR FORCE DIAL 3	- }	Modem Slot 2A PDCS Line 3	#3	{	$\frac{05}{06}$ AIR FORCE DIAL 3	- }	Modem Slot 2A PDCS Line 3
#4	{	$\frac{07}{08}$ AIR FORCE DIAL 4	- }	Modem Slot 2B PDCS Line 4	#4	{	$\frac{07}{08}$ AIR FORCE DIAL 4	- }	Modem Slot 2B PDCS Line 4
#5	{	$\frac{09}{10}$ AIR FORCE DIAL 5	- }	Modem Slot 3A PDCS Line 5	#5	{	$\frac{09}{10}$ TBD	- }	Modem Slot 3A PDCS Line 5
#6	{	$\frac{11}{12}$ AIR FORCE DIAL 6	- }	Modem Slot 3B PDCS Line 38	#6	{	$\frac{11}{12}$ AIR FORCE DIAL 2	- }	Modem Slot 3B PDCS Line 38
#7	{	$\frac{13}{14}$ TBD	- }	Modem Slot 4A PDCS Line 39	#7	{	$\frac{13}{14}$ AIR FORCE DIAL 5	- }	Modem Slot 4A PDCS Line 39
#8	{	$\frac{15}{16}$ TBD	- }	Modem Slot 4B PDCS Line 40	#8	{	$\frac{15}{16}$ AIR FORCE DIAL 6	- }	Modem Slot 4B PDCS Line 40

Figure 2-7. Dial Circuit Moves for Kunsan AB

**NWS: EHB-6, Modification Note 71**  
**DoD: TO 31P1-4-108-610**  
**FAA: EEM Modification Handbook 6345.1 CHG 40, Chap 37**

**ATTACHMENT 2 (Continued)**

**REWIRE RPG DIAL BLOCK (ALL SITES, EXCEPT ANDERSEN AFB)**

<b><u>BEFORE CIRCUIT MOVE</u></b>				<b><u>AFTER CIRCUIT MOVE</u></b>					
<b>RPG DIAL BLOCK</b>				<b>RPG DIAL BLOCK</b>					
<b>1-RJ21X or TB1</b>				<b>1-RJ21X or TB1</b>					
2-Wire Ckt #1	{	$\frac{01}{02}$	NWS DIAL 1 ——— }	Modem Slot 1A PDCS Line 1	2-Wire Ckt #1	{	$\frac{01}{02}$	NWS DIAL 1 ——— }	Modem Slot 1A PDCS Line 1
#2	{	$\frac{03}{04}$	NWS DIAL 2 ——— }	Modem Slot 1B PDCS Line 2	#2	{	$\frac{03}{04}$	NWS DIAL 2 ——— }	Modem Slot 1B PDCS Line 2
#3	{	$\frac{05}{06}$	NWS DIAL 3 ——— }	Modem Slot 2A PDCS Line 3	#3	{	$\frac{05}{06}$	NWS DIAL 3 ——— }	Modem Slot 2A PDCS Line 3
#4	{	$\frac{07}{08}$	NWS DIAL 4 ——— }	Modem Slot 2B PDCS Line 4	#4	{	$\frac{07}{08}$	NWS DIAL 4 ——— }	Modem Slot 2B PDCS Line 4
#5	{	$\frac{09}{10}$	AIR FORCE DIAL 1 ——— }	Modem Slot 3A PDCS Line 5	#5	{	$\frac{09}{10}$	FAA DIAL ——— }	Modem Slot 3A PDCS Line 5
#6	{	$\frac{11}{12}$	AIR FORCE DIAL 2 ——— }	Modem Slot 3B PDCS Line 6	#6	{	$\frac{11}{12}$	AIR FORCE DIAL 2 ——— }	Modem Slot 3B PDCS Line 6
#7	{	$\frac{13}{14}$	US NAVY DIAL ——— }	Modem Slot 4A PDCS Line 7	#7	{	$\frac{13}{14}$	US NAVY DIAL ——— }	Modem Slot 4A PDCS Line 7
#8	{	$\frac{15}{16}$	FAA DIAL ——— }	Modem Slot 4B PDCS Line 40	#8	{	$\frac{15}{16}$	AIR FORCE DIAL 1 ——— }	Modem Slot 4B PDCS Line 40

Figure 2-8. Dial Circuit Move for Sitka

**ATTACHMENT 3**

**ANDERSEN AFB - INSTALL TWO DIAL MODEMS AND REWIRE RPG DIAL BLOCK**

**Materials Required:**

- Kit A (Two Codex 3262 Dual Dial Modem Cards)
- ESD wrist strap
- Telephone Butt Set, Harris TS22 or equivalent
- Six Wire Modular Adapter, Harris 10220-100 or equivalent
- Impact Punch Tool, Jensen 23-814 or equivalent
- Impact Punch Tool 66 Blade, Jensen 23-066 or equivalent
- TCRs obtained per ATTACHMENT 1
- 3 1/2" Floppy Diskette
- Technical Manual Maintenance Instructions for the Radar Product Generator (RPG)  
Doppler Meteorological Radar WSR-88D Engineering Handbook NWS EHB 6-525, AFTO  
31P1-4-108-452-1, FAA TI 6345.1 V49, Revision No. 1, 30 April 2003

**Initial Conditions:**

All RPGPCA components installed  
RPG Software B3.0 or later is installed  
Equipment powered on and RPG software operational  
Technician is logged into the RPG workstation  
RPG HCI is running  
RPG is clear of RPG alarms  
Received kit for and working Modification Note 65

**Purpose:**

This attachment only applies to Andersen AFB RPG in Guam. The purpose of this procedure is to install and program two dial modem cards, and relocate three dial lines on the TB1 (1-RJ21X) dial-up RPG punch block. The dial ports will be verified as working before and after completion.

**\*\*ESD\*\* CAUTION \*\*ESD\*\***

All WSR-88D printed circuit cards are electrostatic sensitive devices which require special handling.

1. Put ESD wrist strap on bare wrist and connect clip lead to the chassis frame for proper ground.
2. Check/set the DIP switches on both modems as follows:

1,2,7, and 8 are **ON**, all others are Off.

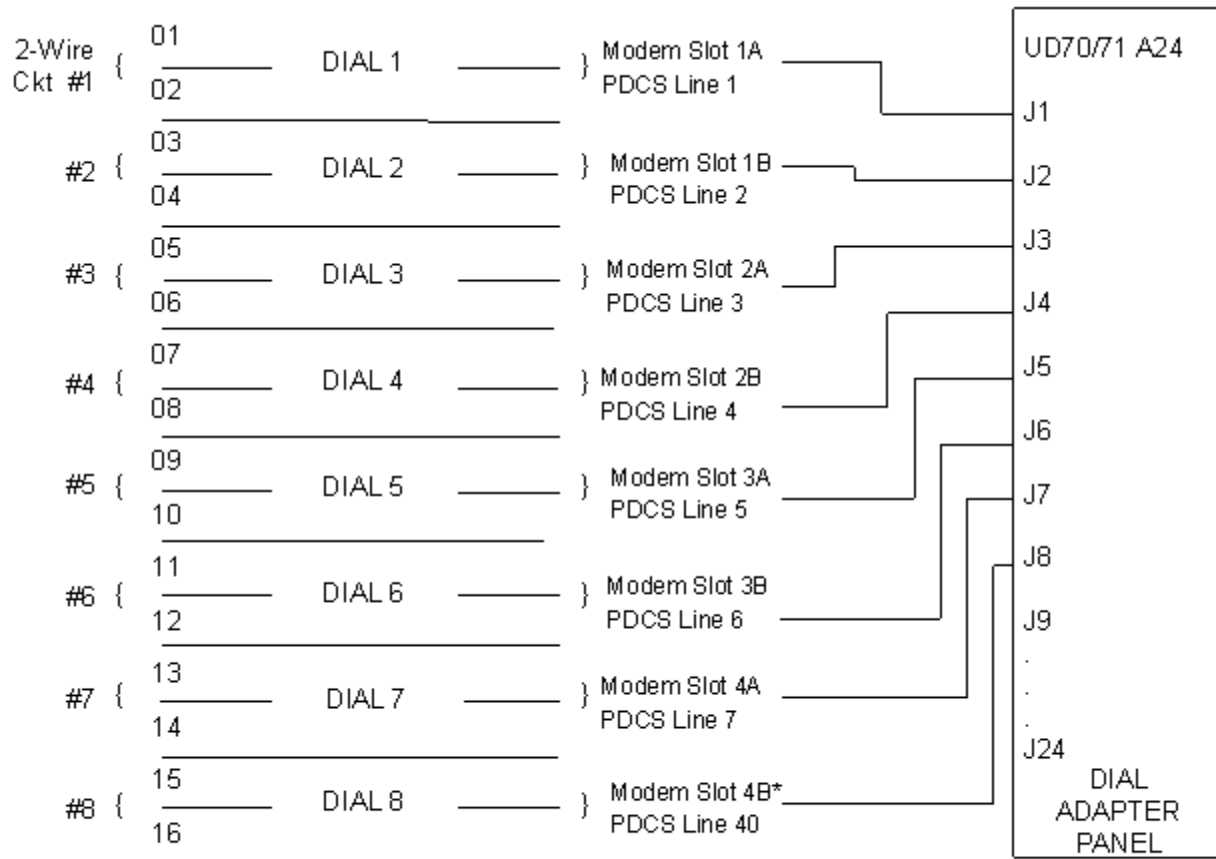
**NOTE**

Modem cards can be removed and installed while power is ON and software is running.

**ATTACHMENT 3 (Continued)**

**ANDERSEN AFB - INSTALL TWO DIAL MODEMS AND REWIRE RPG DIAL BLOCK**

3. Install the two new dual dial modems cards (supplied with kit A) in slots 3 and 4 (from left) of the RPGPCA modem nest (UD70A14). The ejectors tabs on the modem chassis should be in the up position to install the modems as indicated by EHB 6-525, Revision No. 1, 30 April 2003, Figure 6-7, page 6-271.
4. Referring to the map per [Figure 3-1](#), set up the B modem in slot 4 for PPP async operation (EHB 6-525, Revision No. 1, 30 April 2003, para 6-6.12). Set up the A modem in slot 4, plus both A and B modems in slot 3 for X.25 sync operation (EHB 6-525, Revision No. 1, 30 April 2003, para 6-6.11). This completes the modem installations and setup.



\*Set Up this modem for async PPP per EHB 6-525, Revision No. 1, 30 April 2003, para 6-6.12. All other modems should be set up for sync X.25 per para 6-6.11.

Figure 3-1. Map from Dial Adapter Panel to RPG 1-RJ21X (TB1) Block

**NWS: EHB-6, Modification Note 71**  
**DoD: TO 31P1-4-108-610**  
**FAA: EEM Modification Handbook 6345.1 CHG 40, Chap 37**

**ATTACHMENT 3 (Continued)**

**ANDERSEN AFB - INSTALL TWO DIAL MODEMS AND REWIRE RPG DIAL BLOCK**

<b><u>BEFORE CIRCUIT MOVE</u></b>				<b><u>AFTER CIRCUIT MOVE</u></b>			
<b>RPG DIAL BLOCK</b>				<b>RPG DIAL BLOCK</b>			
<b>1-RJ21X or TB1</b>				<b>1-RJ21X or TB1</b>			
2-Wire Ckt #1	{ 01 02	NWS DIAL 1 ——— }	Modem Slot 1A PDCS Line 1	2-Wire Ckt #1	{ 01 02	NWS DIAL 1 ——— }	Modem Slot 1A PDCS Line 1
#2	{ 03 04	AIR FORCE DIAL 1 — }	Modem Slot 1B PDCS Line 2	#2	{ 03 04	TBD ——— }	Modem Slot 1B PDCS Line 2
#3	{ 05 06	AIR FORCE DIAL 2 — }	Modem Slot 2A PDCS Line 3	#3	{ 05 06	TBD ——— }	Modem Slot 2A PDCS Line 3
#4	{ 07 08	AIR FORCE DIAL 3 — }	Modem Slot 2B PDCS Line 4	#4	{ 07 08	TBD ——— }	Modem Slot 2B PDCS Line 4
#5	{ 09 10	US NAVY DIAL ——— }	Modem Slot 3A PDCS Line 5	#5	{ 09 10	US NAVY DIAL ——— }	Modem Slot 3A PDCS Line 5
#6	{ 11 12	TBD ——— }	Modem Slot 3B PDCS Line 6	#6	{ 11 12	*AIR FORCE DIAL 1 — }	Modem Slot 3B PDCS Line 6
#7	{ 13 14	TBD ——— }	Modem Slot 4A PDCS Line 7	#7	{ 13 14	*AIR FORCE DIAL 2 — }	Modem Slot 4A PDCS Line 7
#8	{ 15 16	TBD ——— }	Modem Slot 4B PDCS Line 40	#8	{ 15 16	AIR FORCE DIAL 3 — }	Modem Slot 4B PDCS Line 40

**\*PORT PASSWORD CHANGES REQUIRED ON PDCS LINES 6 AND 7**

Figure 3-2. Dial Circuit Moves for Andersen AFB

**ATTACHMENT 3 (Continued)**

**ANDERSEN AFB - INSTALL TWO DIAL MODEMS AND REWIRE RPG DIAL BLOCK**

5. Refer to the [Figure 3-2](#) for the three circuit(s) to relocate.
6. Reference the TCR obtained per [ATTACHMENT 1](#) to identify the corresponding phone numbers of the three 2-wire dial circuit(s) that will be relocated. Contact the WSR-88D Hotline at 1-800-643-3363 and request a Hotline Specialist dial and receive a product from these port(s) using their X.25 PUP. This check verifies the port(s) are working before the numbers are relocated. For an additional pre-check, use the Telephone Butt Set (Harris TS22 or equivalent) to dial from one RPG number to another. Plug the Butt set into one of the jacks (J1 through J8) on the RPG dial adapter panel. The jacks correspond one for one to the dial block circuit numbers and the Product Distribution Communications Status (PDCS) window of the RPG software as indicated in [Figure 3-1](#) above. Ensure the jack selected has a working dial number as indicated on the TCR. Using the Butt set, dial the RPG phone number(s) of the circuit(s) to be relocated and ensure the correct modem answers. Do not proceed until the dial circuits to be relocated are in working order.
7. Remove the 2-wire dial from the telco side of the NEXRAD RPG dial block (1-RJ21X or TB1). Punch the circuit at its new location using an impact punch tool (Jensen 23-814 or equivalent).
8. Repeat step 7 for each circuit to be relocated.
9. If RPG Software Build 4.0 or later is loaded then proceed to step [19](#). If RPG Software Build 3.0 is installed, then complete steps [10](#) through [18](#) on the RPG workstation to change the port passwords for RPG PDCS Lines 6 through 7.

NWS: EHB-6, Modification Note 71  
DoD: TO 31P1-4-108-610  
FAA: EEM Modification Handbook 6345.1 CHG 40, Chap 37

**ATTACHMENT 3 (Continued)**


**ANDERSEN AFB - INSTALL TWO DIAL MODEMS AND REWIRE RPG DIAL BLOCK**

10. Click on the blue **Comms** button in the Users container of the RPG HCI to open the Product Distribution Comms Status (PDCS) window. Select line 2 as shown below:

Line	Type	Enabled	Proto	ID	User Name	Class	Status	Util	Rate
1	DIALIN	yes	X25			2	COM PEND	0%	0%
2	DIALIN	yes	X25			2	COM PEND	0%	0%
3	DIALIN	yes	X25			2	COM PEND	0%	0%
4	DIALIN	yes	X25			2	COM PEND	0%	0%
5	DIALIN	yes	X25			2	COM PEND	0%	0%
6	DIALIN	yes	X25			2	COM PEND	0%	0%
7	DIALIN	yes	X25			2	COM PEND	0%	0%
8	DIALIN	yes	X25			2	COM PEND	0%	0%
9	DEDIC	yes	X25		RPGOP_50	DISCON	0%	0%	0%
10	DEDIC	yes	X25			1	DISCON	0%	0%
11	DEDIC	yes	X25			1	DISCON	0%	0%
12	DEDIC	yes	X25			1	DISCON	0%	0%
13	DEDIC	yes	X25			1	DISCON	0%	0%
14	DEDIC	yes	X25			1	DISCON	0%	0%
15	DEDIC	yes	X25			1	DISCON	0%	0%
16	DEDIC	yes	X25			1	DISCON	0%	0%
17	DEDIC	yes	X25			1	DISCON	0%	0%
18	DEDIC	yes	X25			1	DISCON	0%	0%
19	DEDIC	yes	X25			1	DISCON	0%	0%
20	DEDIC	yes	X25			1	DISCON	0%	0%
21	DEDIC	yes	X25			1	DISCON	0%	0%
22	DEDIC	yes	X25			1	DISCON	0%	0%
23	DEDIC	yes	X25			1	DISCON	0%	0%
24	DEDIC	yes	X25			1	DISCON	0%	0%


**NOTE**

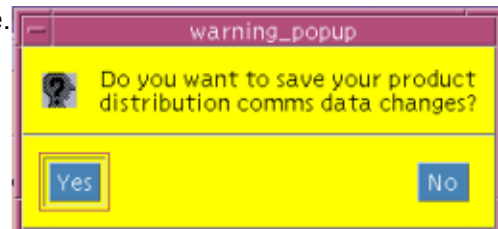
The following step requires an Agency password. If you do not have the password, contact the ROC Hotline at 1-800-643-3363 to request the password.

11. Click on the blue padlock box  in the upper right corner of the PDCS window so that the password box appears. Select the button next to Agency and verify a white dot appears next to it. Type in the Agency password and press the <CR> key. The padlock changes to unlocked.

**ATTACHMENT 3 (Continued)**

**ANDERSEN AFB - INSTALL TWO DIAL MODEMS AND REWIRE RPG DIAL BLOCK**

12. Note the entry next to `Port Pswd` for line 2 in the upper right under the `Line Management` block. Double click on line 3 in the `Product Distribution Lines` section of the PDCS. Line 3 is highlighted in black and the `Line #` changed to 3 in the `Line Management` section. Note the entry next to `Port Pswd` for line 3 under `Line Management`.
13. Double Click on line 6 in the `Product Distribution Lines` area. Ensure that the `Line Management Line #` changed to 6. Click in the box next to `Port Pswd` in the `Line Management` section of the PDCS. Type in the identical password that was noted for line 2. The passwords are case sensitive.
14. Double Click on line 7 in the `Product Distribution Lines` section of the PDCS. Ensure that the `Line Management Line #` changed to 7. Click in the box next to `Port Pswd` in the `Line Management` section of the PDCS. Type in the identical password that was noted for line 3. The passwords are case sensitive.
15. Click on the blue padlock box  in the upper right corner of the PDCS. The warning popup box appears as shown below. Click **yes** in the warning popup box. The box disappears and the padlock returns to the locked state.



16. Open a new Terminal window. At the `user:` prompt, enter: **save\_adapt\_floppy<CR>**. This starts the RPG adaptation data save program. After the following message appears:

```
---> Saving Adaptation Data  
  
---> Insert a new floppy into the floppy drive  
  
---> Hit return when ready
```

17. Insert a new diskette, then enter: **<CR>**. This continues the RPG adaptation data save program. The following message appears:

```
---> Mounting floppy  
  
---> Saving RPG adaptation data to /floppy/floppy0  
  
Saving RPG adaptation data . . .
```

**ATTACHMENT 3 (Continued)**

**ANDERSEN AFB - INSTALL TWO DIAL MODEMS AND REWIRE RPG DIAL BLOCK**

18. The user is returned to the `user:` prompt. Manually press the button on the front of the floppy drive to eject the diskette. This completes the RPG adaptation data save for the current build. Remove the diskette and place the write protect tab to the locked position. Label the diskette with the following information:

RPG Adaptation Data Build 3.0

Date the backup was made

Site ID

Store this diskette in a safe location. This diskette will not be used again in these procedures. This diskette should only be used if the Build 3.0 is reloaded.

19. Verify the two relocated X.25 dial ports are working correctly. Call the WSR-88D Hotline at 1-800-643-3363 and request a Hotline Specialist dial into lines 6 and 7 using their X.25 PUP to verify the port(s) are working with the new port passwords and phone numbers. Also, ask the Hotline to verify line 8 with their DoD Spiral II OPUP. Verify by watching the PDCS and confirm with the Hotline Specialist that a connection is made and a product is received. Request that the Hotline notify ROC engineering to update the WSR-88D Comms database for this RPG.
20. Replace the current TCR with the version titled Telecommunications Circuit Report - Mod Note 71 obtained per [ATTACHMENT 1](#).

ATTACHMENT 4

EFFECTIVITY

NWS

NEXRAD Site Name	City, ST	EQP	SID	ORG Code
Eastern Region				
ALBANY	ALBANY, NY	RPG	ALY	WN9518
BINGHAMTON	JOHNSON CITY, NY	RPG	BGM	WN9515
BOSTON	TAUNTON, MA	RPG	BOX	WN9509
BROOKHAVEN	UPTON, NY	RPG	OKX	WN9912
BUFFALO	BUFFALO, NY	RPG	BUF	WN9528
BURLINGTON	SOUTH BURLINGTON, VT	RPG	BTV	WN9617
CARIBOU	CARIBOU, ME	RPG	CAR	WN9712
CHARLESTON, SC	CHARLESTON, SC	RPG	CHS	WN9208
CHARLESTON, WV	CHARLESTON, WV	RPG	RLX	WN9414
CINCINNATI	WILMINGTON, OH	RPG	ILN	WN9710
CLEVELAND	CLEVELAND, OH	RPG	CLE	WN9524
COLUMBIA	WEST COLUMBIA, SC	RPG	CAE	WN9310
GREER	GREER, SC	RPG	GSP	WN9312
MOREHEAD CITY	NEWPORT, NC	RPG	MHX	WN9307

ATTACHMENT 4 (Continued)

EFFECTIVITY

NEXRAD Site Name	City, ST	EQP	SID	ORG Code
NORFOLK	WAKEFIELD, VA	RPG	AKQ	WN9952
PHILADELPHIA	MOUNT HOLLY, NJ	RPG	PHI	WN9950
PITTSBURGH	CORAOPOLIS, PA	RPG	PBZ	WN9917
PORTLAND, ME	GRAY, ME	RPG	GYX	WN9938
RALEIGH/DURHAM	RALEIGH, NC	RPG	RAH	WN9306
ROANOKE	BLACKSBURG, VA	RPG	RNK	WN9954
STATE COLLEGE	STATE COLLEGE, PA	RPG	CTP	WN9925
STERLING	STERLING, VA	RPG	LWX	WN9931
WILMINGTON	WILMINGTON, NC	RPG	ILM	WN9301
<b>Southern Region</b>				
ALBUQUERQUE	ALBUQUERQUE, NM	RPG	ABQ	WP9365
AMARILLO	AMARILLO, TX	RPG	AMA	WP9363
ATLANTA	PEACHTREE CITY, GA	RPG	FFC	WP9219
AUSTIN/SAN ANTONIO	NEW BRAUNFELS, TX	RPG	EWX	WP9253
BIRMINGHAM	ALABASTER, AL	RPG	BMX	WP9957
BRANDON, MS	JACKSON, MS	RPG	JAN	WP9235

ATTACHMENT 4 (Continued)

EFFECTIVITY

NEXRAD Site Name	City, ST	EQP	SID	ORG Code
BROWNSVILLE	BROWNSVILLE, TX	RPG	BRO	WP9250
CORPUS CHRISTI	CORPUS CHRISTI, TX	RPG	CRP	WP9251
DALLAS/FT WORTH	FORT WORTH, TX	RPG	FWD	WP9259
EL PASO	SANTA TERESA, NM	RPG	EPZ	WP9270
HOUSTON	DICKINSON, TX	RPG	HGX	WP9935
JACKSONVILLE	JACKSONVILLE, FL	RPG	JAX	WP9206
KEY WEST	BOCA CHICA KEY, FL	RPG	BYX	WP9201
KNOXVILLE	MORRISTOWN, TN	RPG	MRX	WP9325
LAKE CHARLES	LAKE CHARLES, LA	RPG	LCH	WP9240
LITTLE ROCK	NORTH LITTLE ROCK, AR	RPG	LZK	WP9340
LUBBOCK	LUBBOCK, TX	RPG	LUB	WP9933
MELBOURNE	MELBOURNE, FL	RPG	MLB	WP9204
MEMPHIS	MEMPHIS, TN	RPG	MEG	WP9334
MIAMI	MIAMI, FL	RPG	MFL	WP9918
MIDLAND/ODESSA	MIDLAND, TX	RPG	MAF	WP9265
MOBILE	MOBILE, AL	RPG	MOB	WP9223
NASHVILLE	OLD HICKORY, TN	RPG	OHX	WP9327

ATTACHMENT 4 (Continued)

EFFECTIVITY

NEXRAD Site Name	City, ST	EQP	SID	ORG Code
NORMAN	NORMAN, OK	RPG	OUN	WP9921
NORTHEAST ALABAMA	HUNTSVILLE, AL	RPG	HUN	WP9914
SAN ANGELO	SAN ANGELO, TX	RPG	SJT	WP9263
SHREVEPORT	SHREVEPORT, LA	RPG	SHV	WP9248
SLIDELL	SLIDELL, LA	RPG	LIX	WP9919
TALLAHASSEE	TALLAHASSEE, FL	RPG	TLH	WP9214
TAMPA	RUSKIN, FL	RPG	TBW	WP9961
TULSA	TULSA, OK	RPG	TSA	WP9356
WESTERN ARKANSAS	TULSA, OK	RPG	TSA	WP9356
<b>Central Region</b>				
ABERDEEN	ABERDEEN, SD	RPG	ABR	WR9659
BISMARCK	BISMARCK, ND	RPG	BIS	WR9764
CHEYENNE	CHEYENNE, WY	RPG	CYS	WR9564
CHICAGO	ROMEIOVILLE, IL	RPG	LOT	WR9969
DENVER	BOULDER, CO	RPG	BOU	WR9469
DES MOINES	JOHNSTON, IA	RPG	DMX	WR9546

ATTACHMENT 4 (Continued)

EFFECTIVITY

NEXRAD Site Name	City, ST	EQP	SID	ORG Code
DETROIT	WHITE LAKE, MI	RPG	DTX	WR9954
DODGE CITY	DODGE CITY, KS	RPG	DDC	WR9451
DULUTH	DULUTH, MN	RPG	DLH	WR9745
EVANSVILLE,IN	PADUCAH, KY	RPG	PAH	WR9957
PADUCAH	PADUCAH, KY	RPG	PAH	WR9957
FARGO/GRAND FORKS	GRAND FORKS, ND	RPG	FGF	WR9750
GOODLAND	GOODLAND, KS	RPG	GLD	WR9465
GRAND ISLAND	HASTINGS, NE	RPG	GID	WR9552
GRAND JUNCTION	GRAND JUNCTION, CO	RPG	GJT	WR9476
GRAND RAPIDS	GRAND RAPIDS, MI	RPG	GRR	WR9635
GREEN BAY	GREEN BAY, WI	RPG	GRB	WR9645
INDIANAPOLIS	INDIANAPOLIS, IN	RPG	IND	WR9438
JACKSON, KY	JACKSON, KY	RPG	JKL	WR9956
LA CROSSE	LA CROSSE, WI	RPG	ARX	WR9643
LINCOLN	LINCOLN, IL	RPG	ILX	WR9436
LOUISVILLE	LOUISVILLE, KY	RPG	LMK	WR9423
MARQUETTE	NEGAUNEE, MI	RPG	MQT	WR9743

ATTACHMENT 4 (Continued)

EFFECTIVITY

NEXRAD Site Name	City, ST	EQP	SID	ORG Code
MILWAUKEE	DOUSMAN, WI	RPG	MKX	WR9965
MINNEAPOLIS	CHANHASSEN, MN	RPG	MPX	WR9658
NCL MICHIGAN	GAYLORD, MI	RPG	APX	WR9610
NORTH PLATTE	NORTH PLATTE, NE	RPG	LBF	WR9562
NORTHERN INDIANA	NORTH WEBSTER, IN	RPG	IWX	WR9534
OMAHA	VALLEY, NE	RPG	OAX	WR9553
PLEASANT HILL	PLEASANT HILL, MO	RPG	EAX	WR9446
PUEBLO	PUEBLO, CO	RPG	PUB	WR9464
QUAD CITIES	DAVENPORT, IA	RPG	DVN	WR9544
RAPID CITY	RAPID CITY, SD	RPG	UNR	WR9662
RIVERTON/LANDER	RIVERTON, WY	RPG	RIW	WR9576
SIOUX FALLS	SIOUX FALLS, SD	RPG	FSD	WR9651
SPRINGFIELD	SPRINGFIELD, MO	RPG	SGF	WR9440
ST LOUIS	WELDON SPRING, MO	RPG	LSX	WR9971
TOPEKA	TOPEKA, KS	RPG	TOP	WR9456
WICHITA	WICHITA, KS	RPG	ICT	WR9450

ATTACHMENT 4 (Continued)

EFFECTIVITY

NEXRAD Site Name	City, ST	EQP	SID	ORG Code
Western Region				
BILLINGS	BILLINGS, MT	RPG	BYZ	WT9677
BOISE	BOISE, ID	RPG	BOI	WT9681
CEDAR CITY	SALT LAKE CITY, UT	RPG	SLC	WT9932
SALT LAKE CITY	SALT LAKE CITY, UT	RPG	SLC	WT9932
ELKO	ELKO, NV	RPG	LKN	WT9903
EUREKA (BUNKER HILL)	EUREKA, CA	RPG	EKA	WT9594
FLAGSTAFF	BELLEMONT, AZ	RPG	FGZ	WT9375
GLASGOW	GLASGOW, MT	RPG	GGW	WT9768
GREAT FALLS	GREAT FALLS, MT	RPG	TFX	WT9950
LAS VEGAS	LAS VEGAS, NV	RPG	VEF	WT9386
LOS ANGELES	OXNARD, CA	RPG	LOX	WT9295
MEDFORD	MEDFORD, OR	RPG	MFR	WT9597
MISSOULA	MISSOULA, MT	RPG	MSO	WT9773
PENDLETON	PENDLETON, OR	RPG	PDT	WT9688
PHOENIX	PHOENIX, AZ	RPG	PSR	WT9278

ATTACHMENT 4 (Continued)

EFFECTIVITY

NEXRAD Site Name	City, ST	EQP	SID	ORG Code
YUMA	PHOENIX, AZ	RPG	PSR	WT9278
POCATELLO	POCATELLO, ID	RPG	PIH	WT9578
PORTLAND, OR	PORTLAND, OR	RPG	PQR	WT9698
RENO	RENO, NV	RPG	REV	WT9488
SACRAMENTO	SACRAMENTO, CA	RPG	STO	WT9914
SAN DIEGO	SAN DIEGO, CA	RPG	SGX	WT9918
SANTA ANA MTS	SAN DIEGO, CA	RPG	SGX	WT9918
SAN FRANCISCO	MONTEREY, CA	RPG	MTR	WT9933
SAN JOAQUIN VALY	HANFORD, CA	RPG	HNX	WT9389
SEATTLE	SEATTLE, WA	RPG	SEW	WT9922
SPOKANE	SPOKANE, WA	RPG	OTX	WT9785
TUCSON	TUCSON, AZ	RPG	TWC	WT9274

DoD

ALTUS AFB	FREDERICK, OK	RPG	FDR	FE4419
ANDERSEN AFB	ANDERSEN AFB, GU	RPG	UAM	FE5240
BEALE AFB	OROVILLE, CA	RPG	BBX	FE4686

ATTACHMENT 4 (Continued)

EFFECTIVITY

NEXRAD Site Name	City, ST	EQP	SID	ORG Code
CAMP HUMPHREYS	CAMP HUMPHREYS, KO	RPG	PTK	FI5294
CANNON AFB	FIELD, NM	RPG	FDX	FE4855
COLUMBUS AFB	GREENWOOD SPRINGS, MS	RPG	GWX	FE3022
DOVER AFB	ELLENDALE STATE FOREST, DE	RPG	DOX	FE4497
DYESS AFB	MORAN, TX	RPG	DYX	FE4661
EDWARDS AFB	BORON, CA	RPG	EYX	FE2805
EGLIN AFB	RED BAY, FL	RPG	EVX	FE2823
FT CAMPBELL	TRENTON, KY	RPG	HPX	FY4812
FT DRUM	MONTAGUE, NY	RPG	TYX	FY4846
FT HOOD	GRANGER, TX	RPG	GRK	FY4824
FT POLK	FT POLK, LA	RPG	POE	FY4825
FT RUCKER	ECHO, AL	RPG	EOX	FY4805
HOLLOMAN AFB	RUIDOSO, NM	RPG	HDX	FE4801
KADENA AB	KADENA AB, JA	RPG	KAD	FH5270
KEESLER AFB MNTC TRNG A	KEESLER AFB, MS	RPG	BIX	FE3010
KEESLER AFB MNTC TRNG B	KEESLER AFB, MS	RPG	BIX	FE3010
KUNSAN AB	KUNSAN AB, KO	RPG	KUZ	FH5284

ATTACHMENT 4 (Continued)

EFFECTIVITY

NEXRAD Site Name	City, ST	EQP	SID	ORG Code
LAJES AB	SANTA BARBARA, AZR	RPG	PLA	FE4486
LAUGHLIN AFB	BRACKETVILLE, TX	RPG	DFX	FE3099
MAXWELL AFB	CARRVILLE, AL	RPG	MXX	FE3300
MINOT AFB	DEERING, ND	RPG	MBX	FE4528
MOODY AFB	SOUTH STOCKTON, GA	RPG	VAX	FE4830
ROBINS AFB	JEFFERSONVILLE, GA	RPG	JGX	FE2067
VANCE AFB	CHEROKEE, OK	RPG	VNX	FE3029
VANDENBERG AFB	ORCUTT, CA	RPG	VBX	FE4610
<b>FAA</b>				
ANCHORAGE FAA (RPG 1)	KENAI, AK	RPG	AHG	6901AJ
ANCHORAGE FAA (RPG 2)	KENAI, AK	RPG	AHG	6901AJ
BETHEL FAA (RPG 1)	BETHEL, AK	RPG	ABC	690112
BETHEL FAA (RPG 2)	BETHEL, AK	RPG	ABC	690112
FAIRBANKS FAA (RPG 1)	FAIRBANKS, AK	RPG	APD	690178
FAIRBANKS FAA (RPG 2)	FAIRBANKS, AK	RPG	APD	690178
KAMUELA/KOHALA APT(RPG 1)	KAMUELA, HI	RPG	HKM	699235

ATTACHMENT 4 (Continued)

EFFECTIVITY

NEXRAD Site Name	City, ST	EQP	SID	ORG Code
KAMUELA/KOHALA APT(RPG 2)	KAMUELA, HI	RPG	HKM	699235
KING SALMON FAA (RPG 1)	KING SALMON, AK	RPG	AKC	690137
KING SALMON FAA (RPG 2)	KING SALMON, AK	RPG	AKC	690137
MIDDLETON ISLAND (RPG 1)	MIDDLETON ISLAND, AK	RPG	AIH	690140
MIDDLETON ISLAND (RPG 2)	MIDDLETON ISLAND, AK	RPG	AIH	690140
MOLOKAI FAA (RPG 1)	MOLOKAI, HI	RPG	HMO	699213
MOLOKAI FAA (RPG 2)	MOLOKAI, HI	RPG	HMO	699213
NOME FAA (RPG 1)	NOME, AK	RPG	AEC	690147
NOME FAA (RPG 2)	NOME, AK	RPG	AEC	690147
SAN JUAN FAA (RPG 1)	SAN JUAN, PR	RPG	JUA	69F362
SAN JUAN FAA (RPG 2)	SAN JUAN, PR	RPG	JUA	69F362
SITKA FAA (RPG 1)	BIORKA ISLAND, AK	RPG	ACG	690141
SITKA FAA (RPG 2)	BIORKA ISLAND, AK	RPG	ACG	690141
SOUTH KAUAI FAA (RPG 1)	SOUTH KAUAI, HI	RPG	HKI	699211
SOUTH KAUAI FAA (RPG 2)	SOUTH KAUAI, HI	RPG	HKI	699211
SOUTH SHORE FAA (RPG 1)	NAALEHU, HI	RPG	HWA	699201
SOUTH SHORE FAA (RPG 2)	NAALEHU, HI	RPG	HWA	699201

ATTACHMENT 5

RPG DIAL CIRCUIT RELOCATON COMPLETION FORM

**DoD and FAA only will complete this form**  
**NWS report completion in EMRS**

Site Name: \_\_\_\_\_

Site Identifier: \_\_\_\_\_

Total Time to Complete this Modification Document: \_\_\_\_\_

Technician's Name(s): \_\_\_\_\_

Technician's Phone Number: \_\_\_\_\_

Date Completed: \_\_\_\_\_

Equipment Modified (SID) RPG \_\_\_\_\_

Problem(s) Encountered:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Upon completion of this form, return the information to the ROC using one of the four methods below:

1. Mailing Address: Program Branch, Retrofit Management Team  
WSR-88D Radar Operation Center  
3200 Marshall Ave., Suite 101  
Norman, OK 73072-8028
2. FAX Number: (405) 366-6553  
ATTN: Retrofit Management Team
3. E-mail Address: NEXRAD.Logistics@noaa.gov
4. Web Version: <http://www.roc.noaa.gov/ssb/logistics/completion.asp>

## Attachment 6 - Sample EMRS Report

**A26 Detail Form - ESCM2, SILVER SPRING, MD :: EMRS ANALYST - Microsoft Internet Explorer**

**GENERAL INFORMATION**  

**WFO\***

**Document No.\***

**1. Open Date**

**Open Time**

**2. Op Initials**

**3. Response Priority**  
☐ Immediate ☐ Low  
☐ Routine ☒ Not Applicable

**4. Close Date**

**Close Time**

**5. Maintenance Description**  characters left RADAR, WSR-88D

**EQUIPMENT INFORMATION**  

**6. Station ID\***

**7. Equipment Code**

**8. Serial Number**

**9. TM**

**10. AT**

**11. How Mal**

**Alert:** Time Remaining: 3:15  
(For Block 12 use only)

**12. EQUIPMENT OPERATIONAL STATUS TIMES**  

a. Fully Operational		b. Partially Operational				c. All Other				d. Not Operational				e. All Other			
		b. Logistic Delay		c. All Other		d. Logistic Delay		e. All Other		f. All Other		g. All Other		h. All Other			
Hours	Minutes	Hours	Minutes	Hours	Minutes	Hours	Minutes	Hours	Minutes	Hours	Minutes	Hours	Minutes	Hours	Minutes		
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>		

**13. PARTS USAGE and CONFIGURATION MANAGEMENT REPORTING**  

ASN	Vendor Part No. (New Part)	Serial Number (Old Part)	Serial Number (New Part)	
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="button" value="New Row"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="button" value="Delete Row"/>

**14. WORKLOAD INFORMATION**  

a. Routine	b. Non-Routine	c. Travel	d. Misc	e. Overtime	
Hours	Minutes	Hours	Minutes	Hours	Minutes
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
			3 15		

**MISCELLANEOUS INFORMATION**  

**15. Maintenance Comments**  characters left

**16. Tech Initials**

**17. SPECIAL PURPOSE REPORTING INFORMATION**  

**a. Mod No.**

**b. Mod Act/Deact Date**

**c. Block C**

**d. Trouble Ticket No.**

**e. Block E**

Done
Internet